

REMARKS

Status of Claims

Claims 1-29 are under examination. Claims 1 is amended herein. Basis for the amendments to claim 1 and new claim may be found throughout the application as-filed, including at page 3, paragraph [0011] and page 4, paragraph [0016]. Claims 5, 8, and 27-28 are canceled herein without prejudice or disclaimer.

Rejections under 35 U.S.C. § 112

Claims 27-28 stand rejected as purportedly lacking enablement in the specification for the recited release profiles. Claims 27-28 is canceled herein without prejudice or disclaimer, and thus this rejection is moot.

Rejection under 35 U.S.C. § 103(a)

The rejection of claims 1-29 under 35 U.S.C. § 103(a) over Voss in view of On or Raffa, and Addicks, and Bergamini or Bodley is respectfully traversed. The rejection of claims 1-29 under 35 U.S.C. § 103(a) over Raffa in view of Voss and Addicks and Bergamini or Bodley is respectfully traversed.

Before turning to the rejections, Applicants note that as discussed with the Examiner in the interview of May 19, 2009, claim 1 is amended herein to recite structural aspects of the present invention, as well as to recite release profile information for tramadol and diclofenac.

To this end, the present invention relates to the discovery that tramadol and diclofenac form a sparingly soluble compound, such that when formulated together, these ingredients form a compound with a relatively low solubility. To address this problem, the present formulations provide the active ingredients in separate subunits, so that no sparingly soluble compound is formed and the active ingredients are released more quickly than if the active ingredients were mixed together. Providing these two particular active ingredients in separate subunits results in unexpected and unforeseen beneficial effect, in that the release of the active ingredients can proceed much faster than if the ingredients were mixed together during the formulation process. Accordingly, the presently claimed formulations allow the skilled artisan to achieve a release rate of tramadol and diclofenac from a single administration unit which corresponds to the release rate from administration units having only tramadol or diclofenac as the active ingredient (see, e.g. paragraph [0048] of the present application and Figures 1, 3 and 4).

There is nothing in any of the cited art which disclose or suggest not only the problems associated with combining tramadol and diclofenac as presently claimed, but also the unexpected benefits afforded by the present formulations. Voss is silent as to any unfavorable physical or chemical interaction between tramadol and codeine and does not disclose discrete subunits for the active ingredients. In all of the specific examples provided in Voss, the active agents are mixed together.

On is cited as disclosing that tramadol may be substituted for codeine. However, On does not remedy the deficiencies of Voss as On provides no indication that such a substitution would result in a formulation with a delayed release profile. In fact it would not, as the chemical interaction between tramadol and diclofenac shows that tramadol cannot simply be substituted for codeine. For example, as shown in Figure 2, if tramadol and diclofenac are embedded together in a conventional matrix tablet, the release profile of both active substances is disadvantageous.

Raffa discloses a composition comprising a tramadol material and an NSAID. Raffa does not explicitly disclose the presently claimed combination of tramadol or a pharmaceutically acceptable salt thereof with diclofenac or a pharmaceutically salt thereof. Moreover, Raffa provides no indication that there might be any problem arising from the direct combination of tramadol and diclofenac.

Addicks discloses a dosage form comprising at least two active agents separated by a coating layer. Bergamini and Bodley are cited as purportedly disclosing that diclofenac exhibits interaction with a number of active ingredients. However, these references do not remedy Voss or Raffa. Neither of the primary references disclose that there would be any disadvantageous result in combining tramadol and diclofenac as mixed together in a single dosage form. Bergamini focuses on the combination of diclofenac with tobramycin and does not disclose tramadol, a completely different active ingredient. Bodley discloses the combination of diclofenac with 2-hydroxypropyl beta-cyclodextrin. Bodley also

does not disclose the combination of tramadol and diclofenac. None of the references disclose the particular issues associated with the combination of diclofenac and tramadol, including the formulation of a compound with a relatively low solubility.

Reconsideration and withdrawal of the rejection are accordingly, respectfully requested.

CONCLUSION

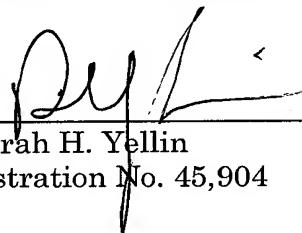
In view of the foregoing, the application is respectfully submitted to be in condition for allowance, and prompt favorable action thereon is earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket No. 029310.50777CP).

Respectfully submitted,

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Deborah H. Yellin
Registration No. 45,904

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
JDE/DHY/hk